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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/915,612

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Aedan Diarmuid Cailean Coffey

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EXAMINER

CHANG, RICHARD

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 09/915,612	Applicant(s) COFFEY, AEDAN DIARMUID CAILEAN	
	Examiner Richard Chang	Art Unit 2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 15,20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments and amendments with respect to claims 14-21 have been fully considered but are moot in view of the new ground(s) of rejection.

Claims 1-13 had been canceled.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,614,796 ("Black et al.") in view of US patent No. 6,141,355 ("Palmer et al.").

Regarding Claims 14 and 19, Black et al. teach a fibre channel arbitrated loop (FCAL) switch (see Fig. 4) with multi-mode configuration including a hub mode (See Fig. 8, Col. 36, lines 3-7), said switch comprising a switching device as a crossbar switch (100 as matrix of switches, see Fig. 4) connected by a plurality of input signal lines (104-108 NL) and connected by a plurality of output signal lines (106-NL), wherein the numbers of the input lines and the output lines are to be assigned, and the individual switching per input

lines and output lines are configurable by control processor ad routing table (See Fig. 4, Col 14, lines 9-22).

Black et al. teaches substantially all the claimed invention but did not disclose expressly the particular application involving limitations of

“for at least one of the N fibre channel inputs, the closing at the same time of at least two switches associated therewith, whereby at least two of the M fibre channel outputs are both connected with the at least one of the N fibre channel inputs.”.

Palmer et al. teaches that the crossbar switch supports multicast which means that different output ports may be configured to follow a signal that appears on the same input port at the same time (See Fig. 4A, Col. 10, lines 47-55).

A person of ordinary skill in the art would have been motivated to employ Palmer et al. in Black et al. in order to obtain a FCAL switch connection and to take advantage of multicast capability wherein different output ports may be configured to follow a signal that appears on the same input port at the same time in claims 14 and 19.

The suggestion/motivation to do so would have been to configure different output ports to follow a signal that appears on the same input port at the same time, as suggested by Palmer et al. in Col. 10, lines 47-55. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Palmer et al. with the Black et al. to obtain the inventions specified in claims 14 and 19.

Regarding claim 16, this claim has limitations that is similar to those of claims 14, thus it is rejected with the same rationale applied against claim 14 above.

Regarding claim 17, this claim has limitations that is similar to those of claims 14, thus it is rejected with the same rationale applied against claim 14 above.

Regarding claim 18, this claim has limitations that is similar to those of claims 14, thus it is rejected with the same rationale applied against claim 14 above.

### ***Allowable Subject Matter***

4. Claims 15, 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if no art rejection can be applied.

### ***Examiner's Statement of Reasons for Allowance***

5. The following is an examiner's statement of reasons for allowance:

The prior art along or in combination fails to teach or make obvious the following limitations:

"a first fibre channel device having a fibre channel input and a fibre channel output, the fibre channel output of the device connected with a first one of the N fibre channel inputs of the matrix of switches, the fibre channel input of the device connected with a first one of the M fibre channel outputs of the matrix of switches,

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a second fibre channel device having a fibre channel input and a fibre channel output, the fibre channel output of the device connected with a second one of the N fibre channel inputs of the matrix of switches, the fibre channel input of the device connected with a second one of the M fibre channel outputs of the matrix of switches,

A fibre channel analyzer having a fibre channel input, the fibre channel input of the analyzer connected with a third one of the M fibre channel outputs of the matrix of switches,

the switches of the matrix disposed such that the first one of the N fibre channel inputs is connected to the second one of the M fibre channel outputs and is also connected with the third one of the M fibre channel outputs." as recited in the independent claims 15 and 20.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*rk*

rkc

Richard Chang  
Patent Examiner  
Art Unit 2663

*9/19/05*  
**DERRICK FERRIS**  
**PATENT EXAMINER**